Review of Progress Toward the Decadal Survey Vision in New Worlds, New Horizons in Astronomy and Astrophysics

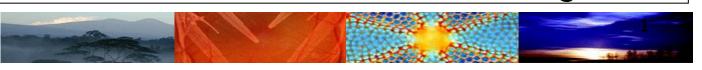
Paul Schechter, CAA Co-Chair



Origin

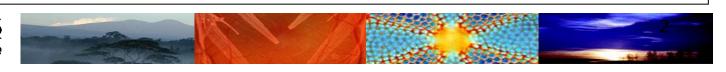
- In the previous decade the NRC convened a mid-decadal review committee to advise NASA and NSF, titled, "Review of Progress in Astronomy and Astrophysics Toward the Decadal Vision" (2005).
- Subsequently, the NASA Authorization Act of 2005 directed NASA to have the performance of each division in the Science Directorate reviewed and assessed by the National Research Council at 5-year intervals.
 - This legal requirement is satisfied by two sets of studies: the decadal surveys conducted every ten years for each of the four Science Mission Directorate divisions, and at the time of 5 years into the implementation period of each decadal, a midterm assessment. The timing of its enactment led to the commissioning of the NRC committee which produced the 2007 report to NASA, "A Performance Assessment of NASA's Astrophysics Program."
- NWNH recommended that a committee be convened to review the responses of NASA, NSF, and DOE to previous NRC advice, primarily the 2010 NRC decadal survey.
- Discussions between NRC, CAA, and agencies occurred at CAA meetings but then in earnest at the Nov 2014 CAA meeting.





Development & Status

- Following the Nov 2014 CAA meeting the CAA and NRC developed a study prospectus for the mid-decadal.
- NASA formally requested the study on Nov 20, 2014.
- Study prospectus approved by NRC Governing Board Executive Committee on Dec 2, 2014.
- Proposals have been submitted to NASA APD, NSF AST; DOE HEP soon.



Schedule & Activities

- Study to begin if/when funding arrives from NASA+NSF.
- Committee of ~12 experts will hold 3 in-person meetings and issue its report 14 months after the date on which the NRC has received at least 70 percent of the total cost of the study, whichever occurs later.
- Committee membership will be pulled initially from CAA membership as possible, then augmented.

DRAFT Statement of Task

The National Research Council shall convene an ad hoc committee to review the responses of NASA's Astrophysics program, NSF's Astronomy program, and DOE's Cosmic Frontiers program (hereafter the Agencies' programs) to previous NRC advice, primarily the 2010 NRC decadal survey, "New Worlds, New Horizons in Astronomy and Astrophysics" (NWNH).

In the context of funding circumstances that are substantially below those assumed in NWNH, the committee's review will include the following tasks:

- 1. Describe the most significant scientific discoveries, technical advances, and relevant programmatic changes in astronomy and astrophysics over the years since the publication of the decadal survey;
- 2. Assess how well the Agencies' programs address the strategies, goals, and priorities outlined in the 2010 decadal survey and other relevant NRC reports;
- 3. Assess the progress toward realizing these strategies, goals, and priorities; and
- 4. In the context of strategic advice provided for the Agencies' programs by Federal Advisory Committees, and in the context of mid-decade contingencies described in the decadal survey, recommend any actions that could be taken to maximize the science return of the Agencies' programs.

The review should not revisit or alter the scientific priorities or mission recommendations provided in the decadal survey and related NRC reports but may provide guidance on implementation of the recommended science and activities portfolio and on other potential activities in preparation for the next decadal survey.

